

# **PIFSC Report on the Logbook Program for the American Samoa Longline Fishery January-March 2007<sup>1</sup>**

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Summary statistics of American Samoa longline catch and effort for the first quarter of 2007, based on date of haul, are shown in Table 1. The table is derived from all logbook data submitted as of May 17, 2007 for longline activities during the first quarter of 2007. As of this date, the documented delinquency rate according to the Department of Marine and Wildlife Resources (DMWR) Daily Effort Census and Delinquency Reporting System for the first quarter of 2007 was about 14%. Some of the data not submitted may be for vessels that began fishing trips in the first quarter but have still not returned to port to turn in their logbooks. Accordingly, the summary data in this report are considered preliminary and subject to change as additional data are received and processed.

According to the Daily Effort Census, 31 vessels were engaged in longline fishing during the first quarter of 2007 (Fig. 1) and so far 26 of these vessels turned in some or all of their longline logs for sets made during the quarter. These 26 vessels made 1,259 sets (Fig. 2) and set 3,652,699 hooks (Fig. 3). The first quarter has always been the slowest quarter of the year for the American Samoa longline fishery in terms of both catch and effort. This quarter showed an increase in both effort and catch over the first quarter of last year. The number of vessels turning in logs this quarter increased by 13% from 23 to 26, the number of sets increased by 21% and the number of hooks set increased by 29%. The average number of hooks used per set also increased by about 6%, from 2728 to 2901, reflecting the continuing trend toward a fishing fleet of larger vessels.

The total catch for all species was 75,480 fish (Fig. 4), an increase of 24% compared to the first quarter of last year. Albacore continued to dominate the catch with 47,396 fish caught in the first quarter of 2007 (Fig. 5), a 35% increase over the 35,210 albacore caught in the first quarter of last year. The catch of bigeye tuna (Fig. 6) was almost the same as in the fourth quarter of 2006 but increased 72% over the bigeye catch in the first quarter of 2006. The catch of skipjack tuna (Fig. 7) was down slightly by 2.5% and the catch of yellowfin tuna (Fig. 8) decreased by about 6% compared to first quarter of 2006. The catch of mahimahi (Fig. 9) was 7 times higher than catch of the first quarter of 2006 while the catch of wahoo (Fig. 10) was almost the same. The catch of billfish (Fig. 11) was down slightly by about 4% compared with the first quarter of 2006 while the catch of sharks (Fig. 12) decreased by 16%.

The albacore catch/1000 hooks (Fig. 13) was up by 5% from first quarter of 2006, reflecting the 35% increase in albacore catch and a 29% increase in the number of hooks used. Because of the larger effort in the first quarter of 2007, the percent increase in catch/1000 hooks is less than the percent increase in the catch for each species mentioned above. Only bigeye tuna (Fig. 14) and mahimahi (Fig. 17) showed an increase in catch/1000 hooks with bigeye tuna increasing by 33% and mahimahi increasing by about 5 times the catch/1000 hooks in the first quarter of 2006. All other species had declines in catch/1000 hooks compared to first quarter of 2006 with skipjack tuna (Fig. 15) and wahoo (Fig. 18) decreasing by 24%, yellowfin tuna (Fig. 16) decreasing by 27%, billfish (Fig. 19) decreasing by 26% and sharks (Fig. 20) decreasing by 35%.

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<sup>1</sup> PIFSC Data Report DR-07-004  
Issued 23 May 2007

**Table 1. Summary of fish catch and nominal fishing effort by American Samoa longline vessels during first quarter 2007 based on logbooks submitted through 17 May 2007.**

**Western Pacific Logbook Summary Report for 1st Quarter 2007**

Vessels landing or based in American Samoa

Based on Date of Haul for all areas

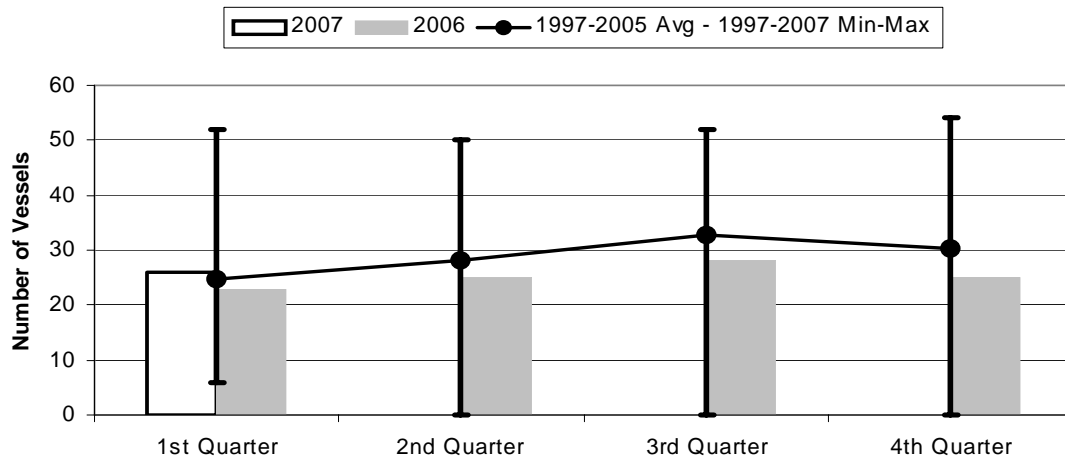
**TRIP INFORMATION**

Number of Vessels: 26  
 Number of Sets: 1259  
 1000's of Hooks Set: 3653  
 Number of Lightsticks Used: 9400

**CATCH INFORMATION**

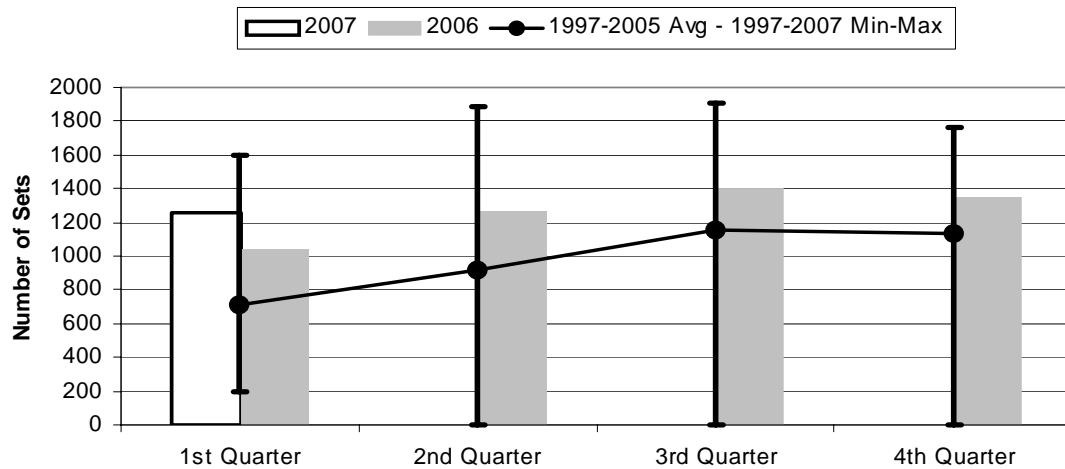
<b>Species</b>	<b># Caught</b>	<b># Kept</b>	<b># Finned</b>	<b># Caught/ 1000 Hooks</b>
<b>BILLFISH</b>				
Black marlin	5	1		0.00
Blue marlin	895	229		0.25
Striped marlin	152	18		0.04
Sailfish	80	10		0.02
Spearfish	138	10		0.04
Swordfish	172	90		0.05
<b>TOTALS</b>	<b>1442</b>	<b>358</b>		<b>0.39</b>
<b>SHARKS</b>				
Blue shark	880	0	2	0.24
Shortfin mako shark	103	5		0.03
Thresher shark	48	0		0.01
White tip oceanic shark	273	1	4	0.07
Misc sharks	169	9		0.05
<b>TOTALS</b>	<b>1473</b>	<b>15</b>	<b>6</b>	<b>0.40</b>
<b>TUNA</b>				
Albacore	47396	47096		12.98
Bigeye tuna	4204	3178		1.15
Bluefin tuna	14	12		0.00
Skipjack tuna	6408	5246		1.75
Yellowfin tuna	6955	6287		1.90
<b>TOTALS</b>	<b>64977</b>	<b>61819</b>		<b>17.79</b>
<b>OTHER PELAGICS</b>				
Mahimahi	697	487		0.19
Moonfish	112	42		0.03
Oilfish	2274	39		0.62
Pomfret	103	16		0.03
Wahoo	4321	3977		1.18
<b>TOTALS</b>	<b>7507</b>	<b>4561</b>		<b>2.06</b>
<b>NON-PMUS</b>				
Misc pelagic fish	81	19		0.02

**Figure 1. American Samoa Longline Vessels Submitting Logs by Quarter for**



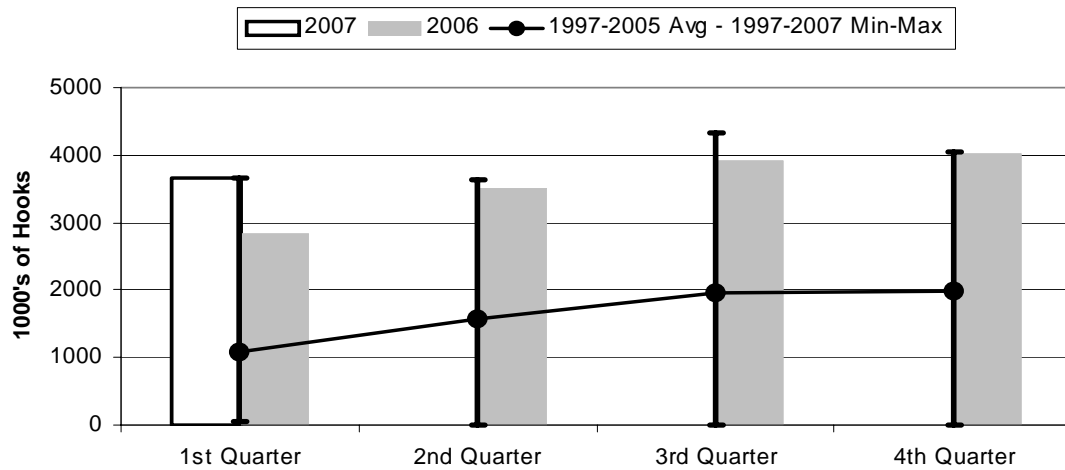
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	26	0	0	0
2006	23	25	28	25
1997-2007 Max	52	50	52	54
1997-2005 Avg	24.9	28.0	32.9	30.4
1997-2007 Min	6	0	0	0

**Figure 2. Number of Sets by American Samoa Longline Vessels by Quarter for**



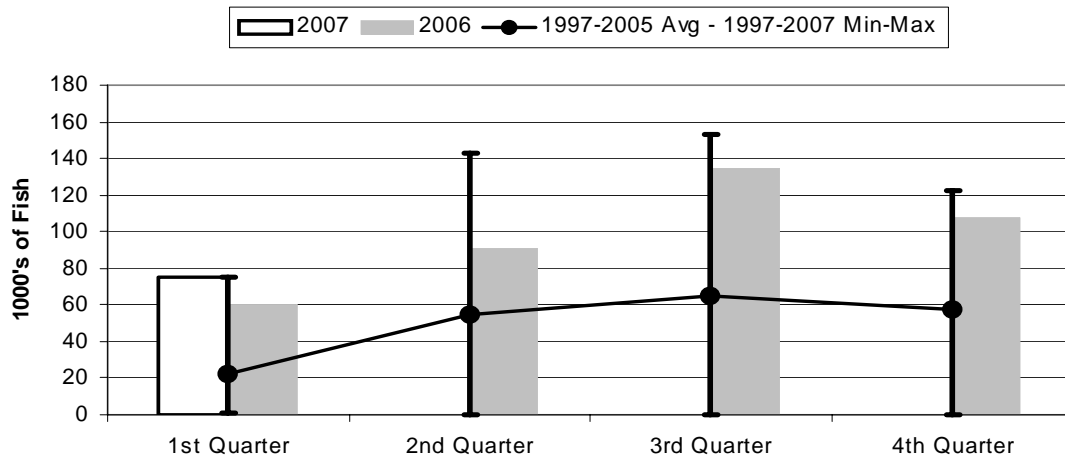
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	1259	0	0	0
2006	1041	1273	1402	1354
1997-2007 Max	1602	1886	1903	1758
1997-2005 Avg	708	918	1158	1138
1997-2007 Min	192	0	0	0

**Figure 3. Number of Hooks Set by the American Samoa Longline Fleet by Quarter for**



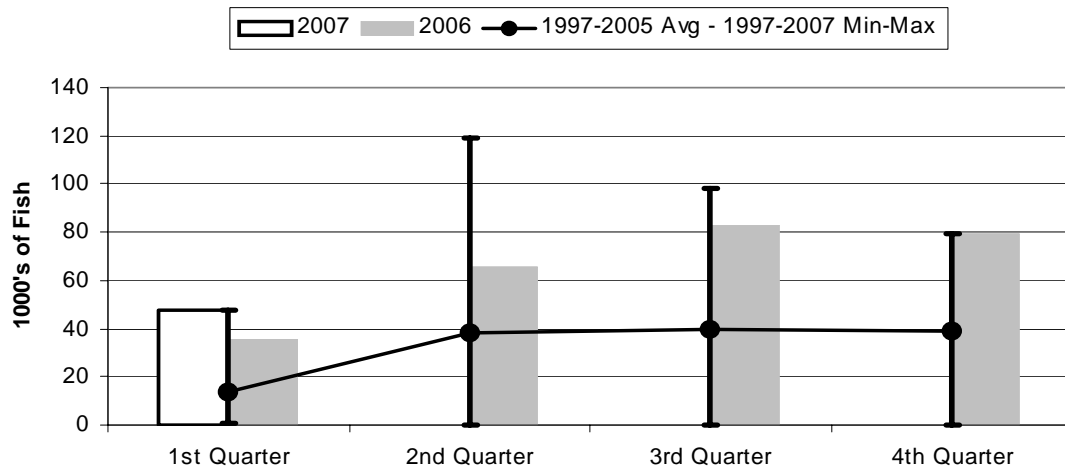
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	3653	0	0	0
2006	2840	3503	3910	4013
1997-2007 Max	3653	3629	4338	4044
1997-2005 Avg	1087	1566	1957	1980
1997-2007 Min	41	0	0	0

**Figure 4. American Samoa Longline Total Catch (All Species) by Quarter for**



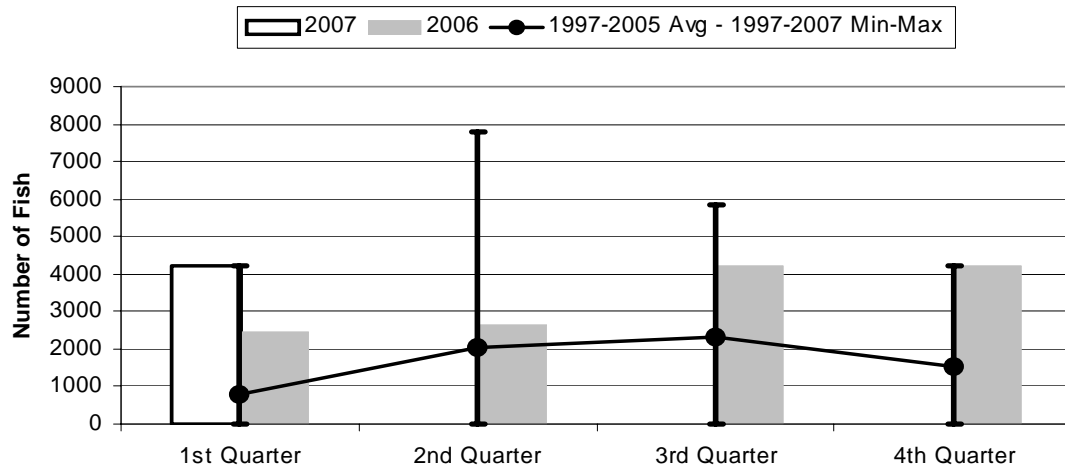
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	75.48	0.00	0.00	0.00
2006	60.74	90.82	134.74	107.66
1997-2007 Max	75.48	142.60	153.30	122.34
1997-2005 Avg	22.28	54.88	65.03	57.16
1997-2007 Min	1.32	0.00	0.00	0.00

**Figure 5. American Samoa Longline Albacore Catch by Quarter for**



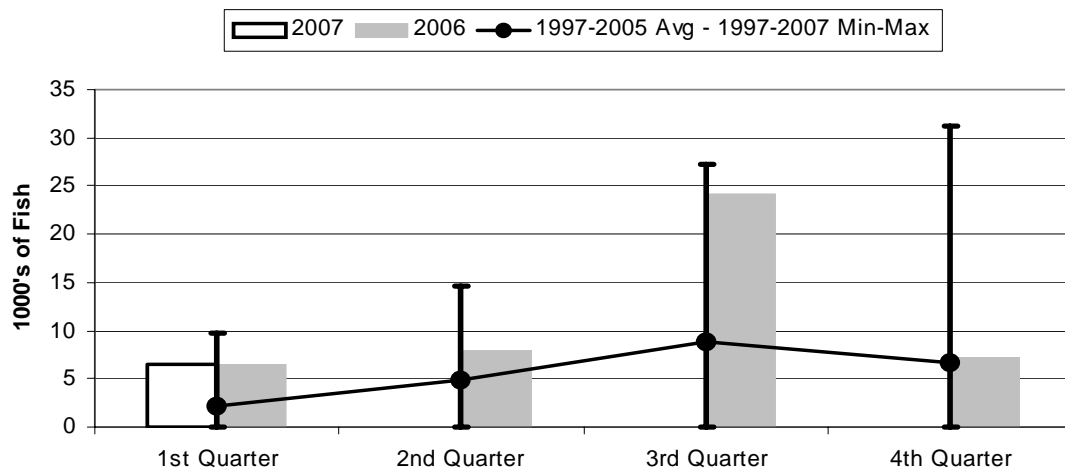
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	47.40	0.00	0.00	0.00
2006	35.21	65.81	82.72	79.36
1997-2007 Max	47.40	118.99	98.09	79.36
1997-2005 Avg	13.85	38.04	39.76	39.14
1997-2007 Min	0.94	0.00	0.00	0.00

**Figure 6. American Samoa Longline Bigeye Tuna Catch by Quarter for**



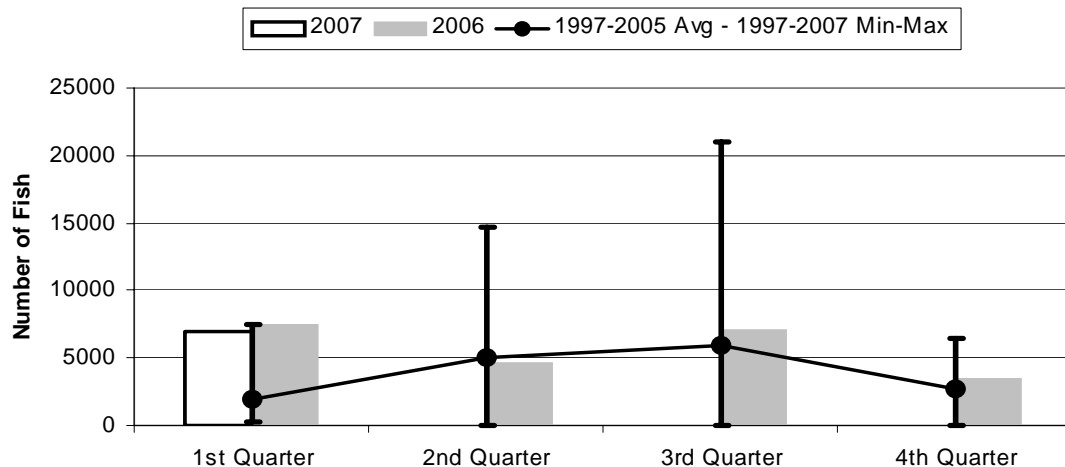
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	4204	0	0	0
2006	2448	2647	4211	4217
1997-2007 Max	4204	7785	5834	4217
1997-2005 Avg	781	2019	2315	1516
1997-2007 Min	6	0	0	0

**Figure 7. American Samoa Longline Skipjack Tuna Catch by Quarter for**



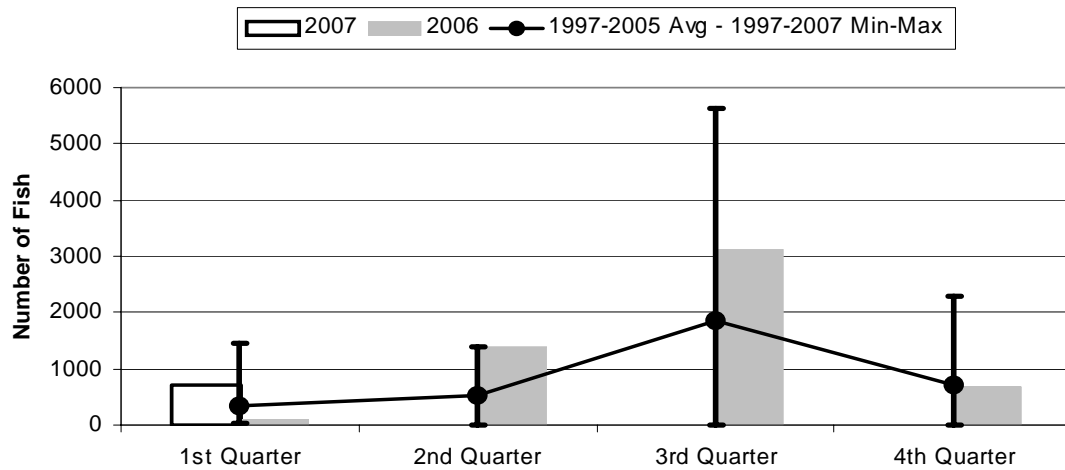
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	6.41	0.00	0.00	0.00
2006	6.58	7.85	24.20	7.23
1997-2007 Max	9.81	14.61	27.23	31.19
1997-2005 Avg	2.20	4.92	8.91	6.67
1997-2007 Min	0.00	0.00	0.00	0.00

**Figure 8. American Samoa Longline Yellowfin Tuna Catch by Quarter for**



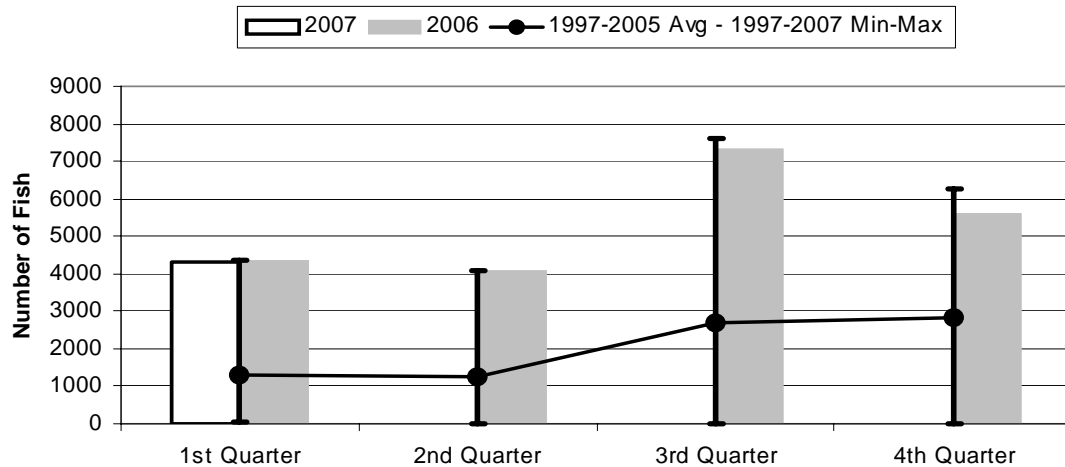
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	6955	0	0	0
2006	7428	4678	7066	3459
1997-2007 Max	7428	14681	20993	6503
1997-2005 Avg	1961	5063	5896	2658
1997-2007 Min	213	0	0	0

**Figure 9. American Samoa Mahimahi Catch by Quarter for**



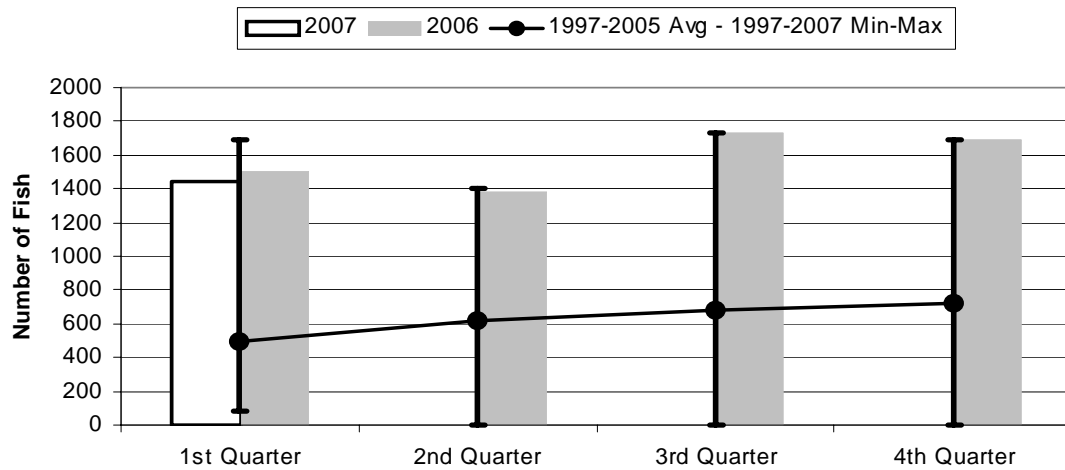
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	697	0	0	0
2006	101	1391	3126	691
1997-2007 Max	1455	1391	5642	2297
1997-2005 Avg	338	517	1857	711
1997-2007 Min	30	0	0	0

**Figure 10. American Samoa Wahoo Catch by Quarter for**



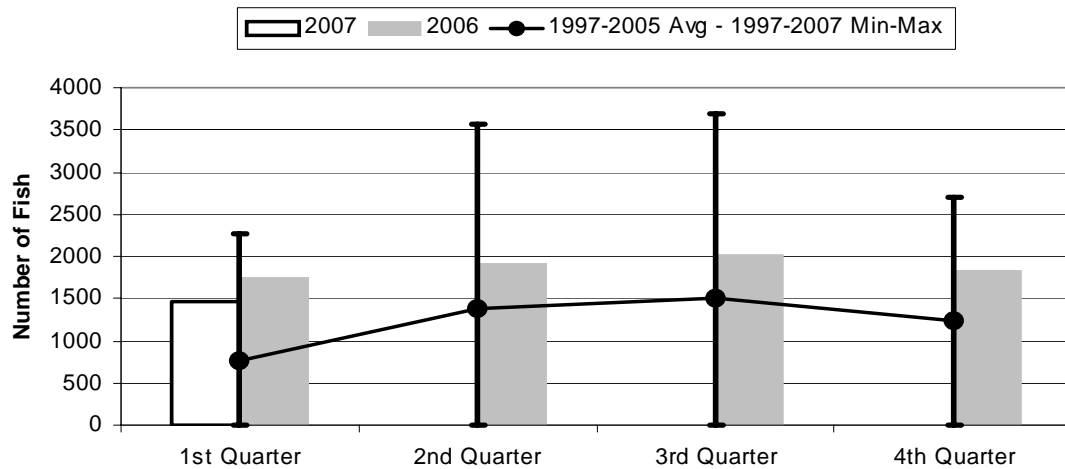
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	4321	0	0	0
2006	4376	4076	7342	5634
1997-2007 Max	4376	4076	7629	6281
1997-2005 Avg	1308	1275	2683	2835
1997-2007 Min	27	0	0	0

**Figure 11. American Samoa Billfish Catch by Quarter for**



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	1442	0	0	0
2006	1509	1386	1729	1690
1997-2007 Max	1692	1404	1729	1690
1997-2005 Avg	492	621	680	725
1997-2007 Min	83	0	0	0

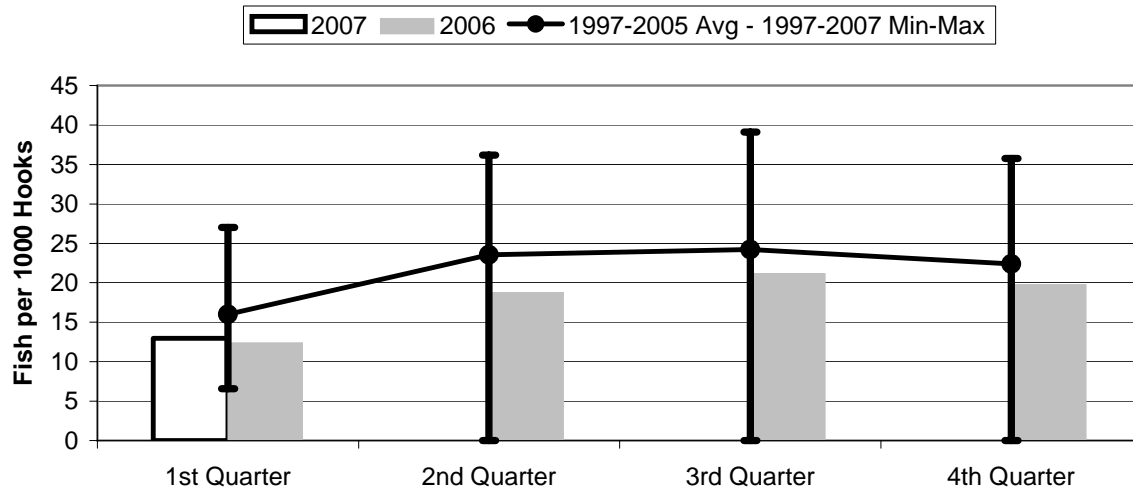
**Figure 12. American Samoa Shark Catch by Quarter for**



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	1473	0	0	0
2006	1757	1909	2012	1845
1997-2007 Max	2262	3562	3686	2695
1997-2005 Avg	764	1379	1502	1243
1997-2007 Min	5	0	0	0

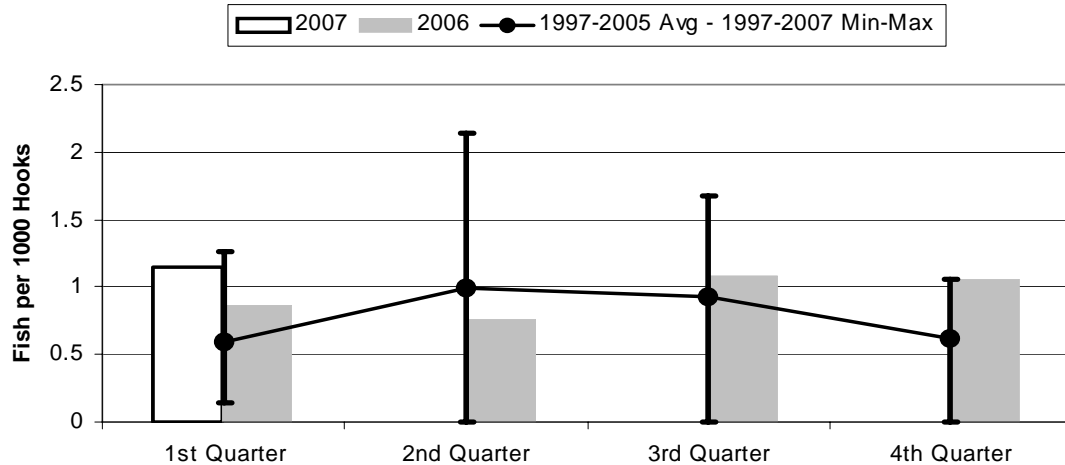


**Figure 13. American Samoa Longline Albacore Catch/1000 Hooks by Quarter for**



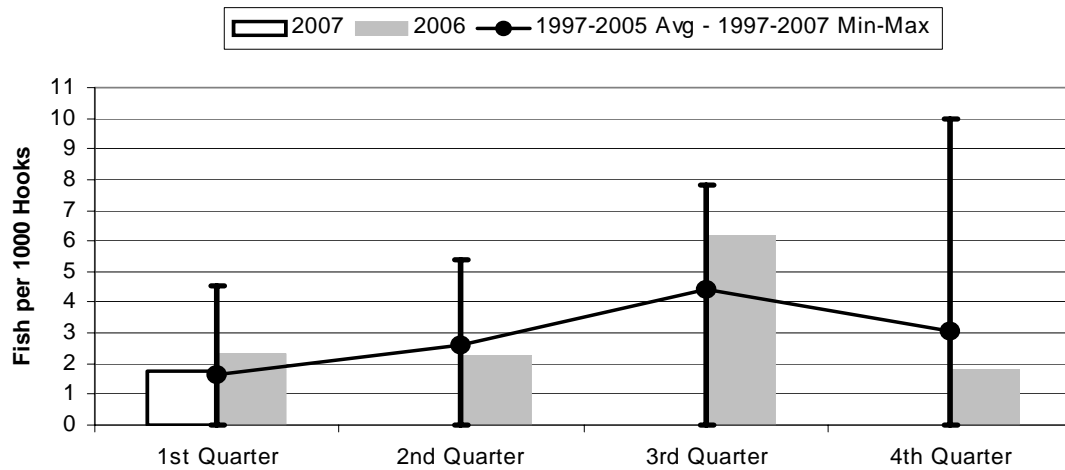
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	12.98	0.00	0.00	0.00
2006	12.40	18.79	21.16	19.77
1997-2007 Max	27.01	36.18	39.13	35.75
1997-2005 Avg	16.00	23.54	24.22	22.39
1997-2007 Min	6.58	0.00	0.00	0.00

**Figure 14. American Samoa Longline Bigeye Tuna Catch/1000 Hooks by Quarter for**



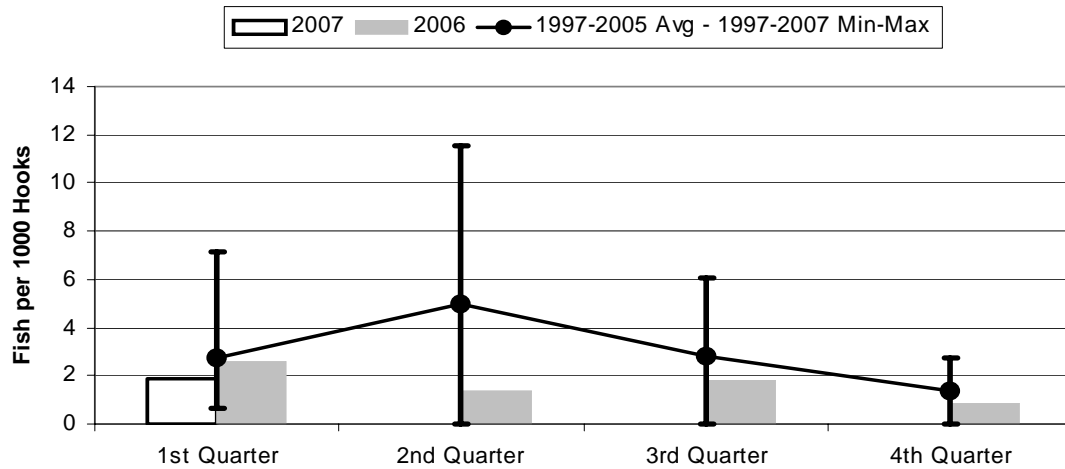
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	1.151	0.000	0.000	0.000
2006	0.862	0.756	1.077	1.051
1997-2007 Max	1.267	2.145	1.679	1.051
1997-2005 Avg	0.586	0.988	0.928	0.622
1997-2007 Min	0.146	0.000	0.000	0.000

**Figure 15. American Samoa Longline Skipjack Tuna Catch/1000 Hooks by Quarter for**



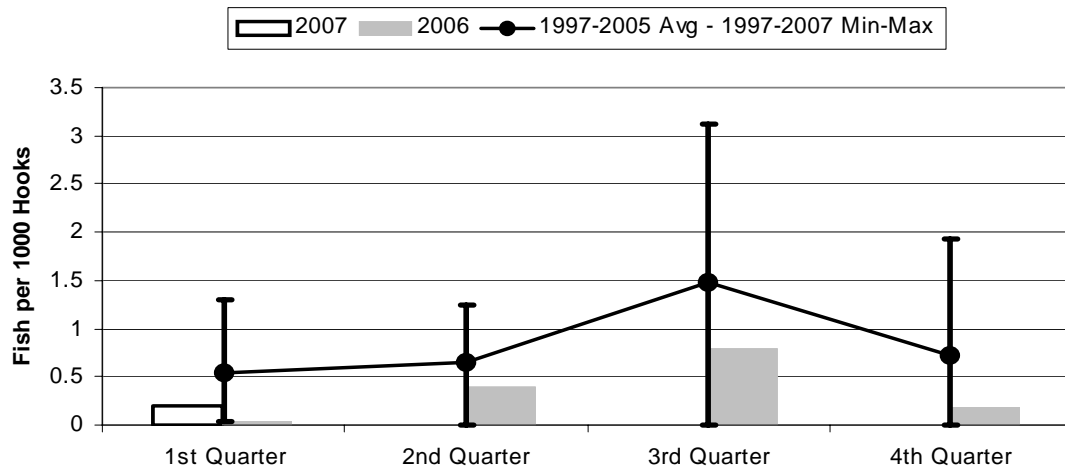
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	1.754	0.000	0.000	0.000
2006	2.317	2.241	6.190	1.801
1997-2007 Max	4.556	5.388	7.837	9.975
1997-2005 Avg	1.642	2.596	4.430	3.063
1997-2007 Min	0.000	0.000	0.000	0.000

**Figure 16. American Samoa Yellowfin Tuna Catch/1000 Hooks by Quarter for**



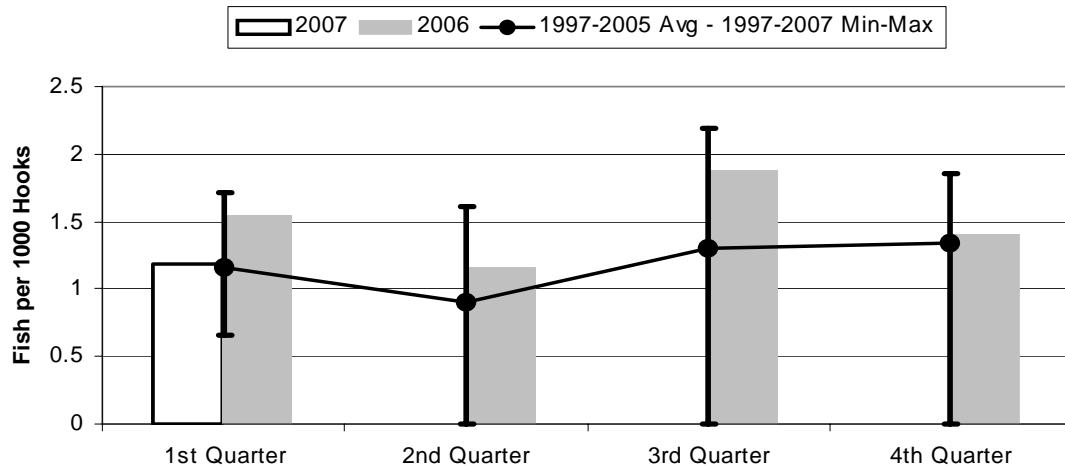
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	1.904	0.000	0.000	0.000
2006	2.616	1.336	1.807	0.862
1997-2007 Max	7.120	11.51	6.041	2.757
1997-2005 Avg	2.717	5.015	2.807	1.398
1997-2007 Min	0.663	0.000	0.000	0.000

**Figure 17. American Samoa Longline Mahimahi Catch/1000 Hooks by Quarter for**



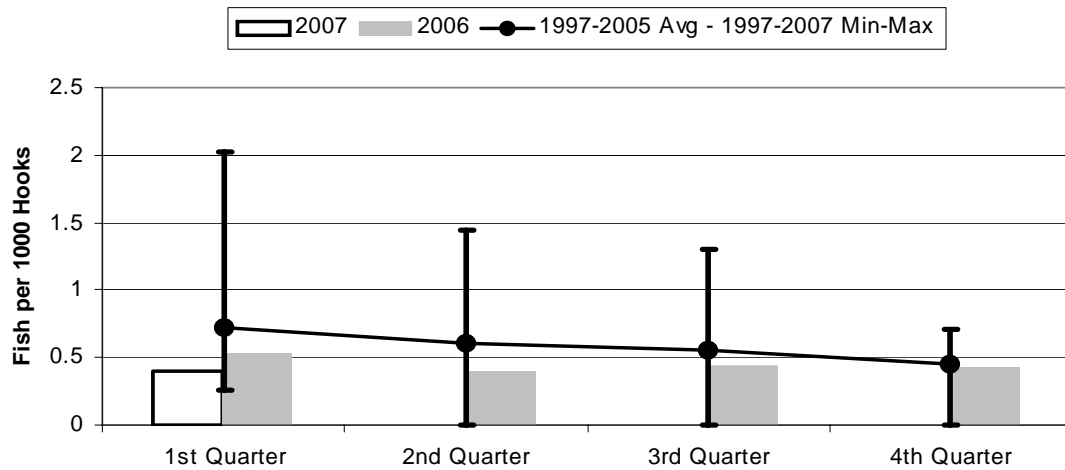
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	0.191	0.000	0.000	0.000
2006	0.036	0.397	0.800	0.172
1997-2007 Max	1.304	1.248	3.125	1.932
1997-2005 Avg	0.549	0.649	1.488	0.723
1997-2007 Min	0.036	0.000	0.000	0.000

**Figure 18. American Samoa Wahoo Catch/1000 Hooks by Quarter for**



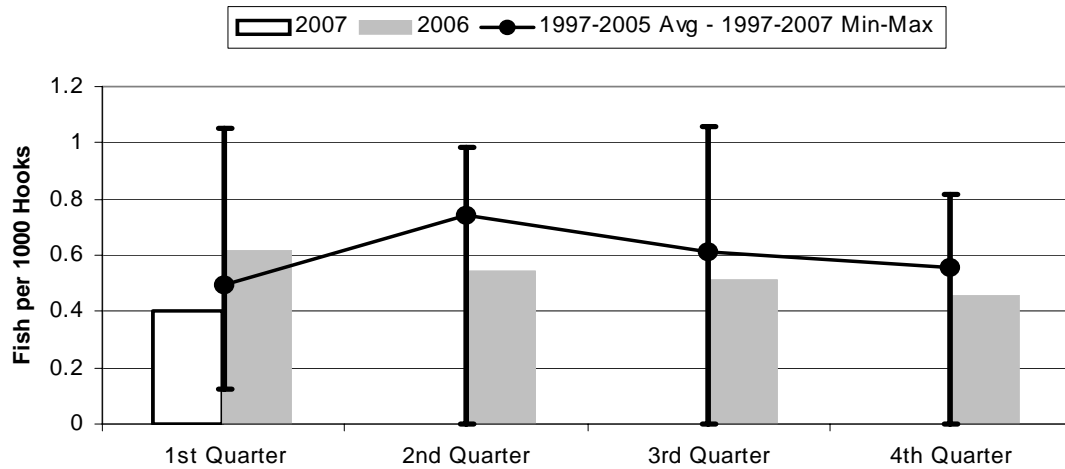
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	1.183	0.000	0.000	0.000
2006	1.541	1.164	1.878	1.404
1997-2007 Max	1.710	1.617	2.195	1.861
1997-2005 Avg	1.161	0.896	1.303	1.343
1997-2007 Min	0.657	0.000	0.000	0.000

**Figure 19. American Samoa Billfish Catch/1000 Hooks by Quarter for**



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	0.395	0.000	0.000	0.000
2006	0.532	0.396	0.442	0.421
1997-2007 Max	2.019	1.439	1.306	0.712
1997-2005 Avg	0.724	0.608	0.549	0.452
1997-2007 Min	0.252	0.000	0.000	0.000

**Figure 20. American Samoa Shark Catch/1000 Hooks by Quarter for**



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2007	0.403	0.000	0.000	0.000
2006	0.619	0.545	0.515	0.460
1997-2007 Max	1.051	0.986	1.061	0.819
1997-2005 Avg	0.494	0.741	0.615	0.554
1997-2007 Min	0.122	0.000	0.000	0.000